

Fire-sprinkler requirements - Detached one-family dwellings¹

Calculated areas to be protected

Dwelling element	Included in calculation of 4,500 square footage threshold? ^{2, 7}	Sprinkler protection required? ⁵	NFPA 13D or IRC P2904 Reference ⁵
Conditioned (heated) space	Yes	Depends on area (see below)	NFPA 13D 8.6.1-8.6.7 or P2904.1.1
Attic	No	No ³	NFPA 13D 8.6.5 or P2904.1.1 exception 1
Garage (heated or unheated)	No	No	NFPA 13D 8.6.4 or P2904.1.1 exception 4
Covered porch/deck/patio with no walls except common wall on home	No	No	NFPA 13D 8.6.4 or P2904.1.1 exception 4
Unconditioned porches of any size	Yes	No	NFPA 13D 8.6.4 or P2904.1.1 exception 4
Conditioned porches of any size	Yes	Yes	NFPA 13D 8.6.1 or P2904.1.1
Basement (finished or unfinished)	Yes	Yes	NFPA 13D 8.6.1 or P2904.1.1
Mechanical room	Yes	Yes	NFPA 13D 8.6.1 or P2904.1.1
Crawlspace	No	No ³	NFPA 13D 8.6.5 or P2904.1.1 exception 1
Closet or pantry of 24 sq ft or more <u>or</u> smallest wall is longer than 3 ft	Yes	Yes ⁶	NFPA 13D 8.6.1 or P2904.1.1
Closet or pantry of less than 24 sq ft <u>and</u> smallest wall is less than 3 ft <u>and</u> no laundry or mechanical equipment is present	Yes	No ⁶	NFPA 13D 8.6.3 or P2904.1.1 exception 2
Bathroom over 55 sq ft, including tub and shower area	Yes	Yes ⁴	NFPA 13D 8.6.1 or P2904.1.1
Bathroom of 55 sq ft or less, including tub and shower area	Yes	No ⁴	NFPA 13D 8.6.2 or P2904.1.1 exception 3

¹Based on the 2012 IRC and MR 1309.0313

²Automatic fire sprinklers are required when the single-family dwelling floor area is 4,500 s.f. or more. The floor area includes all floors and basements. [MR1309.0313 except.#1]

³See IRC P2904.1.1 except. 1 regarding attics, crawl spaces and normally unoccupied concealed spaces that do not contain fuel-fired appliances do not require fire sprinklers.

⁴See IRC P2904.1.1 except. 3 regarding bathrooms, having < 55 s.f.

⁵Source of sprinkler requirements based on NFPA 13D or IRC Section P2904 and as amended in MR 1309.0313 Section R313.3.

⁶See IRC P2904.1.1 except. 2 regarding clothes closets, linen closets, and pantries having < 24 s.f., no dimension >3 feet, and wall and floor surfaces of gypsum board.

⁷See M.R. 1309.0202, Subp. 2 Floor Area. The calculated square footage of the floor within the perimeter of the exterior walls of the building under consideration without deduction for hallways, stairways, closets, the thickness of interior walls, columns, or other features.